CLAIMS

WHAT IS CLAIMED IS:

1. A method of assessing the expression of mRNA for T cell receptor variable subunit α , comprising the steps of:

extracting mRNA from T cells;

performing a polymerase chain reaction using a reaction mixture that includes a nucleotide sequence selected from the group consisting of SEQ ID NOs: 1 through 32 and said mRNA; and

measuring the product of said polymerase chain reaction.

- 2. The method of Claim 1, wherein said measuring occurs by gel electrophoresis or fluorescent detection.
- 3. The method of Claim 1, wherein said polymerase chain reaction is a reverse transcription polymerase chain reaction.
- 4. The method of Claim 3, wherein a progress of said reverse transcription polymerase chain reaction is assessed in real time.
- 5. The method of Claim 1, wherein said reaction mixture further includes deoxynucleotide triphosphates.
- 6. The method of Claim 6, wherein said reaction mixture further includes SEQ ID No. 56.

7. A method of assessing the expression of mRNA for T cell receptor variable subunit β , comprising the steps of:

extracting mRNA from T cells;

performing a polymerase chain reaction using a reaction mixture that includes a nucleotide sequence selected from the group consisting of SEQ ID NOs: 33 through 55 and said mRNA; and

measuring the product of said polymerase chain reaction.

- 8. The method of Claim 7, wherein said measuring occurs by gel electrophoresis or fluorescent detection.
- 9. The method of Claim 7, wherein said polymerase chain reaction is a reverse transcription polymerase chain reaction.
- 10. The method of Claim 9, wherein the progress of said reverse transcription polymerase chain reaction is assessed in real time.
- 11. The method of Claim 7, wherein said reaction mixture further includes deoxynucleotide triphosphates.
- 12. The method of Claim 11, wherein said reaction mixture further includes SEQ ID No. 57.
- 13. A kit for assessing the expression of T cell receptor variable subunit α in a patient, said kit comprising SEQ ID Nos: 1-32, an enzyme capable of performing a polymerase chain

- reaction, and buffer solutions capable of supporting said polymerase chain reaction.
- 14. The kit of Claim 13, wherein said kit further comprises deoxynucleotide triphosphates.
- 15. A kit for assessing the expression of T cell receptor variable subunit β in a patient, said kit comprising SEQ ID Nos: 33-55, an enzyme capable of performing a polymerase chain reaction, and buffer solutions capable of supporting said polymerase chain reaction.
- 16. The kit of Claim 15, wherein said kit further comprises deoxynucleotide triphosphates.
- 17. A gene chip for the measurement of the expression of T cell receptor variable subunit α genes, said gene chip comprising, SEQ ID Nos: 1 through 32.
- 18. A gene chip for the measurement of the expression of T cell receptor variable subunit β genes, said gene chip comprising, SEQ ID Nos: 33 through 55.